shorten the time required for each process, to thereby improve the productivity of "exposed wafers", that is, the throughput. --

Please substitute the paragraph beginning at page 3, line 18, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- Figures 8A - 8D are schematic views, respectively, for explaining examples of a first processing shot in an exposure process and the order of processing the remaining shots in that process, as determined in accordance with the sequence flow of the Figure 6 example. --

Please substitute the paragraph beginning at page 4, line 4, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- Preferred embodiments of the present invention will now be described with reference to the accompanying drawings. Briefly, in these embodiments, the order of processing sample shots, the positions of sample shots, the processing order in an exposure process and the like may be determined so as to shorten the distance between the last shot in a certain sample shot process and the first shot in a subsequent sample shot process and/or the distance between the last shot in a certain sample shot process and the first shot in a subsequent exposure process (hereinafter, "transition distance"). This effectively shortens the movement time for a stage which moves through the transition distance. --

Please substitute the paragraph beginning at page 6, line 22, and ending on page 7, line 4, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- As the sequence starts, first, one of the sample shots Aa - Ad which is closest to the exposure shot No. 1 is determined by calculation on the basis of the X-Y coordinate positions of them (step S21). More specifically, when the X-Y coordinate of the exposure shot No. 1 is ($X_1$, $Y_1$) while the X-Y coordinates of the sample shots Aa - Ad are (Xa, Ya), (Xb, Yb), (Xc, Yc) and (Xd, Yd), respectively, the distances Da - Dd of the sample shots Aa - Ad from the exposure shot No. 1 are given by the following equations. --

Please substitute the paragraph beginning at page 7, line 27, and ending on page 8, line 5, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- The above-described procedure for determining a shot closest to a particular shot, by calculation on the basis of the X-Y coordinate position thereof, can be applied to any other case to be described below. Details of the procedure will, therefore, be omitted in the following description. --

Please substitute the paragraph beginning at page 9, line 13, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- Figure 4 shows a sequence flow for determining the order of processing sample shots in each sample shot process to be made to a wafer having a shot layout such as shown in Figure 5. The number of sample shots in each sample shot process as well as the shot layout in the exposure process are selectable. In this example, the selection may be made to be described below. However, in this example, the number of sample shots for the prealignment process is fixed to two. More specifically, the number of sample shots for prealignment is two (fixed), the number of sample shots for global tilting is four, and the number of sample shots for global alignment is four. --

Please substitute the paragraph beginning at page 12, line 14, and ending on page 13, line 4, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- Subsequently, shot options to be chosen for sample shots in the prealignment process are selected (step S47). In this example, for better correction precision to wafer rotation, a condition that the options should be those shots each being located at the outermost periphery of the shot layout and being present on a straight line passing through the center of the shot layout and extending parallel to the X axis, is set. However, any other rule may be used. In this example, therefore, shot options are those shots marked with triangles in Figure 5, that is, the shots with exposure shot Nos. 11, 16, 17 and 22. Next, among these shot options, one which is closest to the first processing shot $T_1$ to be processed first in the global tilting process is detected



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by calculation on the basis of the X-Y coordinate positions of them (step S48). In this example, a shot with exposure shot No. 17 is detected so. --

Please substitute the paragraph beginning at page 14, line 2, and ending on page 15, line 5, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- Figure 6 shows a sequence flow for determining the order of processing sample shots in each sample shot process as well as the order of processing exposure shots in an exposure process which are to be made to a wafer having a shot layout such as shown in Figure 7. The number of sample shots and positions of them in each sample shot process as well as the shot layout in the exposure process are selectable. Figure 7 shows an example of the selection. Here, it is assumed that the processing order for sample shots in the prealignment process is already determined as an order of Pa and Pb, and that the exposure order is not yet determined. In Figure 7, Pa and Pb denote sample shots for prealignment (two shots in this example), Ta - Td denote sample shots for global tilting (four shots in this example), and Aa - Ad are sample shots for global alignment (four shots in this example). Also, Ea - Ed denote shot options for a first processing shot to be processed first in the exposure process. Numbers 1 - 32 denote exposure shot numbers. The order of exposure shots is determined in accordance with the first processing shot. In this example, the shot options to be chosen for the first processing shot in the exposure process should be those shots which are located at the opposite ends of the top or bottom array (row) of the shot layout, that is, shots Ea - Ed. Also, when any one of these shots is selected as

the first processing shot, the processing order will be determined in a manner as shown in a corresponding one of Figure 8A - 8D. However, any other rule may be used. --

Please substitute the paragraph beginning at page 15, line 6, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- The processing order in the prealignment process is in the order of Pa and Pb, as described above. Thus, as the sequence starts, first, one of the sample shots Ta - Td which is closest to the Pb is determined by calculation on the basis of the X-Y coordinate positions of them (step S61). In this example, the sample shot Td is determined so. Subsequently, the processing order for the sample shots Ta - Td is so determined that the thus detected shot is taken as the first shot. The last shot to be processed last is named as shot $T_4$ (step S62). Here, in this example, in the sample shot process, the processing is going to be made to the sample shots counterclockwise. However, any other rule may be used in place of the counterclockwise processing. In this example, therefore, the sample shots will be processed in an order of Td, Ta, Tb, and Tc. The first last shot $T_4$ for the global tilting process is the sample shot Tc. --

Please substitute the paragraph beginning at page 16, line 10, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- Subsequently, among the shots Ea - Eb, one which is closest to the shot $A_4$ (shot Ab) is detected by calculation on the basis of the X-Y coordinate positions of them (step S65). In this example, the shot Eb is determined so. Thus, the first processing shot to be processed first in the

exposure process is the shot Eb. Also, the order of an exposure process corresponding to this is determined such as shown in Figure 8B (step S66). --

Please substitute the paragraph beginning at page 17, line 2, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- Figure 9 is a flow chart of a procedure for the manufacture of microdevices such as semiconductor chips (e.g., ICs or LSIs), liquid crystal panels, CCDs, thin film magnetic heads or micro-machines, for example. --

Please substitute the paragraph beginning at page 17, line 7, with the following. A marked-up copy of this paragraph, showing the changes made thereto, is attached in Appendix A.

-- Step 1 is a design process for designing a circuit of a semiconductor device. Step 2 is a process for making a mask on the basis of the circuit pattern design. Step 3 is a process for preparing a wafer by using a material such as silicon. Step 4 is a wafer process (called a pre-process) wherein, by using the so prepared mask and wafer, circuits are practically formed on the wafer through lithography. Step 5 subsequent to this is an assembling step (called a post-process) wherein the wafer having been processed by step 4 is formed into semiconductor chips. This step includes an assembling (dicing and bonding) process and a packaging (chip sealing) process. Step 6 is an inspection step wherein an operation check, a durability check and so on for the semiconductor devices provided by step 5, are carried out. With these processes, semiconductor devices are completed and they are shipped (step 7). --